

**REMARKS**

Claims 1-23 are pending in this application. The Examiner noted that Claim 9 was missing in the listing of the claims in the Amendment filed August 30, 2005. It is respectfully submitted that Claim 9 is included herein and remains pending in its original form. Applicants have amended the specification in a manner believed to obviate the Examiner's objection to the specification for certain informalities, namely, to correct the filing date of the referenced patent application on page 19. Applicants therefore respectfully submit that no new matter has been added to this application nor have any new issues been raised by this amendment. Moreover, it is believed that the claims as presented herein places the application in condition for allowance. Accordingly, entry and consideration of the present Amendment is deemed appropriate as it places the application in condition for allowance.

The Examiner has provisionally rejected Claims 1-3, 6, 11-12, 15-18 and 21-23 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending U.S. Application No. 10/779,422. Upon resolution of all outstanding issues remaining in the Office Action, Applicants will consider the timely submission of a Terminal Disclaimer.

The Examiner has provisionally rejected Claims 1-3 and 10-14 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending U.S. Application No. 10/699,529. Upon resolution of all outstanding issues remaining in the Office Action, Applicants will consider the timely submission of a Terminal Disclaimer.

The Examiner has provisionally rejected Claims 1, 3, 10-18 and 22-23 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending U.S. Application No. 10/699,507. Upon resolution of all outstanding issues remaining in the Office Action, Applicants will consider the timely submission of a Terminal Disclaimer.

The Examiner has provisionally rejected Claims 1, 3, 15, 17 and 22 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending U.S. Application No. 10/699,509. Upon resolution of all outstanding issues remaining in the Office Action, Applicants will consider the timely submission of a Terminal Disclaimer.

The Examiner has finally rejected Claims 1-6, 10 and 15-19 under 35 U.S.C. §103(a) as being unpatentable over Kolosov et al., U.S. Publication No. 2004/0123650 ("Kolosov et al.") in view of O'Rear, U.S. Publication No. 2003/0100453 ("O'Rear") or Gatto, U.S. Publication No. 2003/0171226 ("Gatto").

As pointed out by the Examiner, nowhere does Kolosov et al. disclose or suggest a high throughput method for screening lubricating oil compositions, under program control, by measuring the oxidation stability of each sample to provide oxidation stability data for each sample as generally recited in Claim 1. Nor, as pointed out by the Examiner, does Kolosov et al. disclose or suggest a system for screening lubricating oil composition samples, under program control, employing a means for measuring the oxidation stability of the selected samples to obtain oxidation stability data and for transferring the oxidation stability data to the computer controller as generally recited in Claim 15. Rather, Kolosov et al. merely disclose a system and

method for screening a library of a multitude of genera of material samples for rheological properties utilizing a large number of broad tests.

O'Rear fails to cure the deficiencies of Kolosov et al. Specifically, nowhere does O'Rear disclose or suggest a high throughput method for screening lubricating oil composition samples comprising "measuring the oxidation stability of each sample to provide oxidation stability data for each sample; and, outputting the results" as presently recited in Claim 1. Nor does O'Rear disclose or suggest a system for screening lubricating oil composition samples, under program control, comprising "a computer controller for selecting individual samples for testing; receptacle moving means responsive to instructions from the computer controller for individually moving the selected samples to a testing station for measuring oxidation stability of the selected samples; means for measuring the oxidation stability of the selected samples to obtain oxidation stability data and for transferring the oxidation stability data to the computer controller" as presently recited in Claim 15. Rather, O'Rear discloses a blend of synthetic and non-synthetic lube base oils wherein the lube base oil product has a greater stability in the absence of additives than the stability of the synthetic lube base oil and has a greater stability in the presence of additives than the non-synthetic lube base oil.

Gatto also fails to cure the foregoing deficiencies of Kolosov et al. Specifically, nowhere does Gatto disclose or suggest a high throughput method for screening lubricating oil composition samples comprising "measuring the oxidation stability of each sample to provide oxidation stability data for each sample; and, outputting the results" as presently recited in Claim 1. Nor does Gatto disclose or suggest a system for screening lubricating oil composition samples, under program control, comprising "a computer controller for selecting individual

samples for testing; receptacle moving means responsive to instructions from the computer controller for individually moving the selected samples to a testing station for measuring oxidation stability of the selected samples; means for measuring the oxidation stability of the selected samples to obtain oxidation stability data and for transferring the oxidation stability data to the computer controller” as presently recited in Claim 15. Rather, Gatto discloses testing organomolybdenum compositions useful as lubricant additives in a base oil using the Caterpillar Micro-Oxidation test.

In order to meet the burden of a *prima facie* obviousness rejection, the Examiner alleges that it would have been obvious to one of ordinary skill in the art at the time of the invention to screen the lubricant/additive compositions in the combinatorial array taught by Kolosov et al. for oxidation stability since Kolosov et al. teach that the plurality of samples in the array are screened for various material characteristics, and both O’Rear and Gatto teach that it is common to screen lubricating oil compositions for their oxidation stability by either determining the time required for a lubricant sample to consume a predetermined amount of oxygen or by measuring the amount of deposits formed by a lubricant sample exposed to oxidation reaction conditions. The Examiner goes on to state that although a large number of different types of flowable samples are taught by Kolosov et al as being analyzed in a high throughput manner in a combinatorial library by measuring many different parameters, the fact remains that the disclosure of Kolosov et al does teach of the analysis of lubricant compositions having additives therein in a high throughput manner by placing many different types of the lubricant compositions in a plurality of receptacles, automatically moving the receptacles to locations for measurement of parameters and measuring many different parameters of the samples including

those associated with the long-term stability of the compositions like thermal degradation, chemical composition, etc. Thus, it is the Examiner's apparent belief that since Kolosov et al. teach measuring many different parameters of the samples including those associated with the long-term stability of the compositions like thermal degradation, chemical composition, etc., one skilled in the art would be motivated to combine the secondary references to O'Rear and Gatto with Kolosov et al. as they teach it is common to measure the long-term stability of a lubricant oil composition having an additive therein by determining the oxidation stability of the composition.

However, it well established that there must be some teaching, motivation or suggestion to select and combine references relied upon as evidence of obviousness. Moreover, obviousness cannot be established using hindsight. Kolosov et al. disclose a large number of broad tests for characterizing properties of a genera of material such as density, melt index, thermal degradation, aging characteristics, weight-average molecular weight, number-average molecular weight, viscosity-average molecular weight, peak molecular weight, approximate molecular weight, polydispersity index, molecular-weight-distribution shape, relative or absolute component concentration, conversion, concentration, mass, hydrodynamic radius, radius of gyration, chemical composition, amounts of residual monomer, presence and amounts of other low-molecular weight impurities in samples, particle or molecular size, intrinsic viscosity, molecular shape, molecular conformation, and/or agglomeration or assemblage of molecules.

The fact that Kolosov et al. disclose characterizing such properties as thermal degradation and chemical composition amongst the many different properties of interest of a genera of material disclosed therein certainly does not provide any suggestion that a lubricating oil

composition can be screened for oxidation stability in a high throughput method or apparatus. Thermal degradation tests can be used for many different applications, e.g., polymers to determine flame retardancy, foods, etc., and at no point provides any suggestion of a method or system for screening lubricating oil composition samples for oxidation stability under program control such that one skilled in the art upon reading the disclosure of Kolosov et al. would be motivated to modify the system and method for testing the genera of flowable materials with any of the broad tests disclosed therein and arrive at the specifically claimed method and apparatus. In fact, it is unclear how chemical composition even relates to long term stability to provide any motivation for screening a lubricating oil composition for oxidation stability. Certainly, O'Rear and Gatto do not cure the deficiencies of Kolosov et al. as O'Rear and Gatto provide no suggestion or motivation to test lubricating oil compositions for oxidation stability in a high throughput method or system. Only by using applicants' disclosure as a guide has the Examiner been able to piece together the claimed invention. Accordingly, Claims 1-6, 10 and 15-19 are believed to be nonobvious, and therefore patentable, over Kolosov et al. and O'Rear or Gatto. Thus, withdrawal of the rejection is respectfully requested.

The Examiner has finally rejected Claim 9 under 35 U.S.C. §103(a) as being unpatentable over Kolosov et al. in view of Perez et al., U.S. Patent No. 5,236,610 ("Perez et al.").

The foregoing deficiencies of Kolosov et al. discussed above with respect to the rejection of Claim 1, from which Claim 9 depends, apply with equal force to this rejection. Perez et al. do not cure the above-noted deficiencies of Kolosov et al. Rather, Perez et al. disclose stable high temperature liquid lubricant blends and antioxidant additives. Perez et al. further disclose two differential scanning calorimetry methods for studying oxidation stability. However, it is not

seen where in Perez et al. there is any suggestion, motivation or even a hint of a high throughput method and system for screening a plurality of lubricating oil composition samples, under program control, by measuring the oxidation stability of each sample and outputting the results.

Instead, in order to meet the burden of a *prima facie* obviousness rejection, the Examiner alleges that based upon the combination of Kolosov et al. and Perez et al., it would have been obvious to one of ordinary skill in the art at the time of the invention to screen the lubricant/additive compositions in the combinatorial array taught by Kolosov et al. for oxidation stability since Kolosov et al. teach that the plurality of samples in the array are screened for various material characteristics like thermal degradation, chemical composition, etc., and Perez et al. teach that it is common to screen lubricating oil compositions for their oxidation stability by using differential scanning calorimetry.

However, as stated above, it well established that there must be some teaching, motivation or suggestion to select and combine references relied upon as evidence of obviousness. Moreover, obviousness cannot be established using hindsight. Kolosov et al. disclose a large number of broad tests for characterizing properties of a genera of materials such as density, melt index, thermal degradation, aging characteristics, weight-average molecular weight, number-average molecular weight, viscosity-average molecular weight, peak molecular weight, approximate molecular weight, polydispersity index, molecular-weight-distribution shape, relative or absolute component concentration, conversion, concentration, mass, hydrodynamic radius, radius of gyration, chemical composition, amounts of residual monomer, presence and amounts of other low-molecular weight impurities in samples, particle or molecular

size, intrinsic viscosity, molecular shape, molecular conformation, and/or agglomeration or assemblage of molecules.

The fact that Kolosov et al. disclose characterizing such properties as thermal degradation and chemical composition amongst the many different properties of interest disclosed therein does not provide any hint or suggestion that a lubricating oil composition can be screened for oxidation stability in a high throughput method or apparatus. Again, thermal degradation tests can be used for many different applications, e.g., polymers, foods, etc., and at no point provides any suggestion of a method or system for screening lubricating oil composition samples for oxidation stability under program control such that one skilled in the art upon reading the disclosure of Kolosov et al. would be motivated to modify the system and method for testing the genera of flowable material with any of the broad tests disclosed therein and arrive at the specifically claimed method and apparatus. In fact, it is unclear how chemical composition even relates to long term stability to provide any motivation for screening a lubricating oil composition for oxidation stability. Perez et al. certainly do not cure the deficiencies of Kolosov et al. as Perez et al. provide no suggestion or motivation to test lubricating oil compositions for oxidation stability in a high throughput method or system. Only using applicants disclosure as a guide has the Examiner been able to piece together the claimed invention. Accordingly, Claim 9 is believed to be nonobvious, and therefore patentable, over Kolosov et al. and Perez et al. Thus, withdrawal of the rejection is respectfully requested.

The Examiner has finally rejected Claims 7-8 and 20-21 under 35 U.S.C. §103(a) as being unpatentable over Kolosov et al. in view of O'Rear or Gatto and further in view of McFarland et al., U.S. Patent No. 6,541,271 ("McFarland et al.").



The foregoing deficiencies of Kolosov et al., O'Rear and Gatto discussed above with respect to the rejections of Claims 1 and 15, from which Claims 7, 8, 20 and 21 ultimately depend, apply with equal force to this rejection. McFarland does not cure the above-noted deficiencies of Kolosov et al., O'Rear and Gatto. Rather, McFarland merely discloses a method and apparatus for characterizing liquids, dissolved organic or inorganic molecules, covalent network solids, ionic solids and molecular solids utilizing thermal imaging and infrared spectroscopic imaging. However, it is not seen where in McFarland there is any suggestion, motivation or even a hint of a high throughput method and system for screening a plurality of lubricating oil composition samples, under program control, by measuring the oxidation stability of each sample and outputting the results. Thus, nothing in McFarland would lead one skilled in the art to modify the system and method of Kolosov et al. in view of O'Rear or Gatto by looking to the disclosure of McFarland and arrive at the claimed high throughput method and system for screening lubricating oil composition, under program control, by measuring the oxidation stability of each sample and outputting the results.

For the foregoing reasons, Claims 7, 8, 20 and 21 are believed to be nonobvious, and therefore patentable, over Kolosov et al., O'Rear, Gatto and McFarland.

The Examiner has finally rejected Claims 11-14 under 35 U.S.C. §103(a) as being unpatentable over Kolosov et al. in view of O'Rear or Gatto and further in view of Smrcka et al., European Patent No. 1,233,361 ("Smrcka et al.").

The foregoing deficiencies of Kolosov et al., O'Rear and Gatto discussed above with respect to the rejections of Claim 1, from which Claims 11-14 ultimately depend, apply with equal force to this rejection. Smrcka et al. do not cure and is not cited as curing the above-noted

deficiencies of Kolosov et al., O'Rear or Gatto. Rather, Smrcka et al. is merely cited for its disclosure of storing test results in a data carrier. Accordingly, Claims 11-14 are believed to be nonobvious, and therefore patentable, over Kolosov et al., O'Rear, Gatto and Smrcka et al.

The Examiner has finally rejected Claims 22-23 under 35 U.S.C. §103(a) as being unpatentable over Kolosov et al. in view of O'Rear or Gatto and further in view of Garr et al., U.S. Patent No. 5,993,662("Garr et al.").

The foregoing deficiencies of Kolosov et al., O'Rear and Gatto discussed above with respect to the rejections of Claim 15, from which Claims 22 and 23 ultimately depend, apply with equal force to this rejection. Garr et al. do not cure and is not cited as curing the above-noted deficiencies of Kolosov et al., O'Rear or Gatto. Rather Garr et al. is simply cited for the disclosure of employing a bar code to identify individual containers. Accordingly, Claims 22 and 23 are believed to be nonobvious, and therefore patentable, over Kolosov et al., O'Rear, Gatto and Garr et al.

For the foregoing reasons, Claims 1-23 as presented herein are believed to be in condition for allowance. Such early and favorable action is earnestly solicited.

Respectfully submitted,



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